

DATASHEET

SMC1A Rabbit Monoclonal Antibody(C840)

CAT. NO. AMA00452

KEY FEATURES

Target	SMC1A	Source / Host	Rabbit
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to SMC1A
Specificity	Recognizes endogenous levels of SMC1A protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human SMC1A. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 143 kD; Observed: 155 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	DXS423E; KIAA0178; SB1.8; SMC1; SMC1L1; Structural maintenance of chromosomes protein 1A; SMC protein 1A; SMC-1-alpha; SMC-1A; Sb1.8
Gene Symbol	SMC1A
Entrez Gene	8243(Human)
SwissProt	Q14683(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arex.bio or your local distributor.

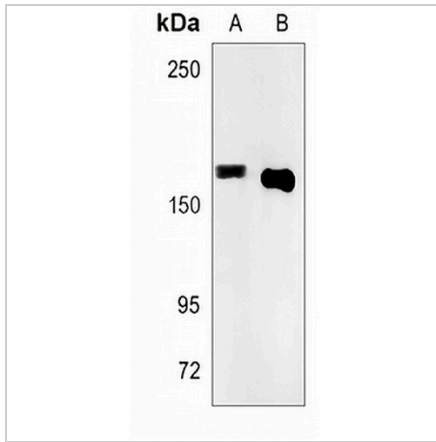
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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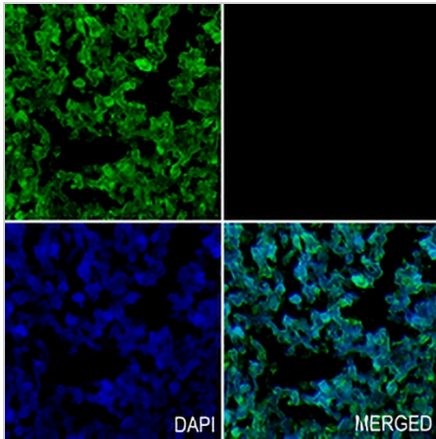
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Western blot analysis of SMC1A expression in HeLa (A), Jurkat (B) whole cell lysates. (Predicted band size: 143 kD; Observed band size: 155 kD)



Immunohistochemical analysis of SMC1A staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. Tyramide-AREX® Fluor 488 (green) was used as the chromogen. The section was then counterstained with DAPI (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.